

REMARKSStatus of claims

Claims 1-31 remain in this application. Claims 8, 14, 16, and 21-26 are currently being amended. Applicant acknowledges with gratitude the allowance of claims 1-5.

Claim Rejections – 35 USC § 112

Claims 8, 16, 23 and 26 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, the Office Action states that “standard patch panel” as used in the above claims renders those claims indefinite. Applicant has amended claims 8, 16, 23 and 26 by removing “standard” so that the disputed term now reads as “patch panel”. The term “patch panel” does not contain wording that can be construed as vague or indefinite. In view of these amendments to claims 8, 16, 23 and 26, Applicant respectfully requests that the rejections under 35 USC §112 be withdrawn.

Claim Rejections – 35 USC § 102

Claims 14-17 stand rejected under 35 USC §102(e) as being anticipated by Im et al. (US Patent No. 6,519,392). In paragraph 4 of the Office Action, the Examiner refers to claims 21 and 24 when discussing Im. For purposes of argument, Applicant assumes that the Examiner meant to include claims 21 and 24 with the rejection of claims 14-17 under Im.

At the outset, Im must teach each and every element of the respective claims to which it is applied in order for Im to serve as a valid §102(e) reference. Im fails to teach each and every element of Applicant's claims 14-17, 21 and 24. Therefore, Im is not a valid §102(e) reference for at least the reasons argued hereinbelow. First, Im discloses a tap coupler which comprises, among other things, a graded index (GRIN) lens converting a part of the optical signals provided by an optical fiber into parallel output beams

(abstract). Much like Pan, Im teaches only embodiments of the optical tap coupler having a GRIN lens therein (see, for example, Figs. 2, 3, 4A, 4B, 5A and 5B, and col. 2, lines 48-50). In fact, neither the specification nor the claims of Im contain the word “connector”. As such, Im cannot plausibly anticipate amended independent claims 14, 21, or 24.

Applicant’s invention of claim 14, 21, and 24 is further distinguishable from Im in that the reference requires a refractive element, namely a GRIN lens. In contrast, Applicant’s invention of amended claims 14, 21 and 24 has optical coupling occurring without the use of a refractive element such as a GRIN lens, as shown in at least Figs. 47-50 and 54. For at least these reasons, Im is an improper 35 USC §102(e) reference since Im does not teach each and every element of independent claims 14, 21 and 24. As such, Applicant respectfully requests the withdrawal of the 35 USC §102(e) rejection based on Im and allowance of claims 14-17, 21 and 24.

Claims 14-17, 21-26 and 28-30 have been rejected under 35 U.S.C. 102(b) as being anticipated by Pan et al. (US Patent No. 5,652,814). Applicant strenuously disagrees with the continued 35 USC §102(b) rejection based on Pan for at least the reasons argued below.

Pan discloses only a fiberoptic coupler (abstract). As shown in at least Figs. 2, 7, 8 and 10, Pan utilizes a GRIN lens, or conventional lens, and glass sleeve to hold the fiber(s) and provide an interfacing means to another fiber configured in a similar manner (abstract, col. 4, line 66, to col. 5, line 10). The Examiner correctly points out that Pan discloses an optical tap (Fig. 7), wavelength-dependent filter (Fig. 11) with optical fiber 72 taken as an input fiber and optical fibers 70, 71 taken as output fibers (Office Action, ¶5, lines 3-5). However, Applicant finds **no** reference, implicitly or explicitly, to a “coupler integral with the optical connector” anywhere in Pan as asserted by the Examiner (Office Action, ¶5, line 5). Simply stated, Pan does not mention “connector” anywhere in the disclosure. The dashed lines surrounding elements in some of the figures, including Figs. 7 and 11 upon which the Examiner relies, are not described or labeled in connection with Figs. 7 and 11 so it is impossible to know with specificity to what the dashed lines refer. For at least these reasons, Applicant respectfully requests that the Examiner withdraw the rejection of claims 14-17, 21-26 and 28-30 since the assertion that an “optical connector” is disclosed in Figs. 7 and 11 is herewith unsubstantiated.

Claim Rejections – 35 USC § 103

Claims 18-20, 27 and 31 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Pan et al. in view of Im et al.

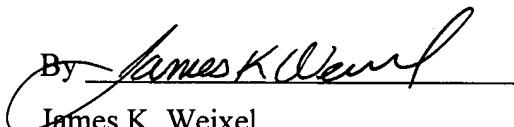
As previously discussed in connection with the §102(b) rejections, Pan **does not** teach the elements of claims 14-17. In particular, Applicant reiterates that both Pan and Im are silent with respect to an “optical connector” of any type. Since each of Applicant’s claims 18-20, 27 and 31 recite “connector” either directly or by way of dependency, Pan does not render them obvious. In addition, Pan and Im require the use of refractive optical elements such as GRIN lenses. In contrast, Applicant’s claims do not require refractive optical elements. As a result, the 35 USC §103(a) rejection of claims 18-20, 27 and 31 is improper as it fails to support a *prima facie* showing of obviousness. Withdrawal of the 35 USC §103(a) rejection and allowance of claims 18-20, 27 and 31 are respectfully requested in view of the above arguments.

Claims 6-13 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Kusuda et al. (US Patent No. 6,644,866) in view of Pan et al. (US Patent No. 5,652,814). In the Office Action, the Examiner states “However, Kusuda et al. **does not** disclose the [sic] connector to be a coupler connector assembly” (Office Action, paragraph 8, page 5, *emphasis added*). As noted in the arguments above, Pan also fails to teach or suggest a “connector.” As previously noted, the Office Action states that Kusuda fails to cure this fatal defect in Pan; therefore, combining the teachings of Kusuda with those of Pan plainly fail to teach Applicant’s claimed invention. Since neither reference contains an explicit teaching of Applicant’s claimed invention nor any suggestion to modify, a proper 35 USC §103(a) rejection cannot be supported. Applicant respectfully requests that the rejection of claims 6-13 be withdrawn and that these claims be allowed.

CONCLUSION

In view of the amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone call would expedite the prosecution of this case, the Examiner is invited to call the undersigned at (508) 416-2487.

Respectfully submitted,  
BOWDITCH & DEWEY, LLP

By   
James K. Weixel  
Date: 8/9/2004  
Registration No.: 44,399  
Direct tel.: (508) 416-2487  
Telephone: (508) 879-5700  
Facsimile: (508) 929-3073

Bowditch & Dewey, LLP  
161 Worcester Road  
P.O. Box 9320  
Framingham, Massachusetts 01701-9320